

STABILITY CONTROL SYSTEM AND METHOD FOR COMPRESSORS OPERATING IN PARALLEL

ABSTRACT OF THE DISCLOSURE

A control system is provided to maintain stable operating conditions for centrifugal compressors operating in parallel when one of the centrifugal compressors enters into an unstable operating condition. The control system determines an unstable operating condition in response to signals indicating the motor current or power consumption of each compressor and the position of the pre-rotation vanes of the compressors. Once an unstable operating condition is determined, the control system closes the pre-rotation vanes to each compressor until the unstable operating condition has been corrected.